

**TITLE: INTERIOR AND EXTERIOR GRILLE INSERTS AND METHOD FOR
MAKING SAME**

5 BACKGROUND OF THE INVENTION

The present invention relates to an interior and an exterior grille insert and method for making same.

Recently decorative inserts have become popular for mounting on the front of the permanent vehicle grille. These grille inserts take a variety of shapes and forms, but as a general rule they are shaped to fit the perimeter of permanent vehicle grille.

In the manufacture of these grille inserts, there is a considerable amount of scrap. This is because the grille insert is cut to the particular decorative shape desired, and the scrap material is discarded.

Therefore a primary object of the present invention is the provision of an improved 15 interior and exterior grille insert and the method for making same.

A further object of the present invention is the provision of a method for making interior and exterior grille inserts which minimizes the scrap material resulting from the shaping of the grille insert.

A further object of the present invention is the provision of an improved interior 20 and exterior grille insert which are complimentary to one another so that the interior grille insert assumes the shape of the central opening in the exterior grille insert.

A further object of the present invention is the provision of a grille insert which is decorative in appearance, efficient in operation, and durable in use.

25 BRIEF SUMMARY OF THE INVENTION

The foregoing objects may be achieved by an ornamental device for a vehicle having a vehicle grille, the vehicle grille having a vehicle grille perimeter extending there around. The ornamental device comprises a first grille insert having a size substantially smaller than the size of the vehicle grille and having a first grille perimeter sized to fit 30 completely within and be spaced inwardly from the vehicle grille perimeter along the entire

length of the first grille perimeter. A bracket attaches the first grille insert to the vehicle grille.

The method of the present invention involves making first and second grille inserts for attachment over the first and second vehicle grilles of first and second vehicles respectively. The first and second vehicle grilles each have first and second vehicle grille perimeter edges respectively. The method includes taking a blank sheet of metal having a first perimeter edge extending there around. An opening is cut in the blank of sheet material, the opening following a predetermined pattern so as to form a first grille insert having a first perimeter edge and having an opening therein that is shaped in the predetermined pattern. The opening also forms a second grille insert having a second perimeter edge shaped and sized in the predetermined pattern. The first grille insert is attached to the first vehicle grille and the second grille insert is attached to the second vehicle grille. The second grille insert is smaller than the second vehicle grille.

According to another feature of the above method the first perimeter edge of the first grille insert is approximately the same size and shape of the first vehicle grille and the method comprises registering the first grille insert with the first vehicle grille before attaching it in place.

According to another feature of the above method, the second grille insert is attached to the second vehicle grille in a position over the second vehicle grille so that the perimeter edge of the second grille insert is spaced inwardly from the second vehicle grille perimeter.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of the interior grille insert mounted over the front of a vehicle grille.

Figure 2 is a view similar to Figure 1, but showing the exterior grille insert mounted over the vehicle grille.

Figure 3 is a sectional view taken along lines 3-3 of Figure 1 and 3-3 of Figure 2.

Figure 4 is a perspective view showing the method for cutting the interior and exterior grilles.

Figure 5 is a top plan view of the interior vehicle grille.

Figure 6 is a top plan view of the exterior vehicle grille.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings the numeral 10 generally designates the interior grille
5 insert of the present invention and the numeral 12 generally represents the exterior grille
insert of the present invention. Both grille inserts 10 and 12 are mounted in superimposed
relationship over the vehicle grille opening 14 of a vehicle grille 16. The interior grille
insert 10 includes an outer perimeter 18 which maybe cut in a variety of decorative shapes
to achieve the desired effect. Also a central opening 20 maybe provided in the interior
10 grille insert 10 to show the vehicle identification emblem which appears often in the center
of the vehicle grille 16.

Exterior grille insert 12 includes an outer perimeter 22 which coincides with the
outer perimeter of the vehicle grille opening 14. Exterior grille insert 12 includes a central
opening 24 having a perimeter 26 which coincides exactly in size and shape with the outer
15 perimeter 18 of interior grille insert 10.

As can be seen in Figure 1, the vehicle grille 16 appears outside the perimeter 18 of
the interior grille insert 10. In other words perimeter 18 of the interior grille insert 10 is
spaced inwardly from the vehicle grille opening 14. In contrast, in Figure 2, the vehicle
grille 16 is visible through the central opening 24 and the exterior of vehicle grille 16 is
20 blocked from view by the exterior grille insert 12.

Figure 3 illustrates the manner in which the grille inserts 10, 12 are attached to the
vehicle grille 16. The vehicle grille 16 includes a plurality of cross members 30. A screw
or bolt 28 extends through the grille inserts 10 or 12 and includes a nut 29 on its inner end.
A bracket 32 includes a vertical leg 34 having a bolt hole 36 therein through which the bolt
25 28 extends. The bracket 32 also includes a u-shaped portion 38 which fits around and
mates with the cross member 30. By tightening the nut 29 it is possible to attach the
interior grille 10 or the exterior grille 12 to the front of the vehicle grille 16.

Referring to Figures 5 and 6, the various bolts 28 are shown.

Figure 4 illustrates the manner in which the interior and exterior grilles are formed.
30 A laser cutter 40 is shown being used with a laser beam 42 that does the cutting. However
other methods of cutting maybe used without detracting from the invention. As can be

seen in Figure 4, the exterior grille 12 is formed into a blank having the exterior perimeter 22. Then the laser cutter 40 is used to cut out a pattern followed by the interior perimeter opening of the exterior grille 12. This pattern also forms the outer perimeter 18 of the interior grille insert 10. Figure 5 shows the completed interior grille 10 and Figure 6 shows 5 the completed exterior grille 12. As can be seen in Figures 5 and 6 the exterior perimeter 18 of interior grille insert 10 matches the exterior perimeter 26 of grille opening 24 in exterior grille insert 12.

Thus there is little or no scrap formed as the result of forming the interior and exterior grilles 10, 12. The shapes of the interior and exterior grilles 12 maybe varied to 10 any variety of desired shapes or forms. Similarly the interior grille 10 can be formed with an interior opening 20 that conforms to any desired logo or identification that appears on the vehicle grille. Thus it can be seen that the device accomplishes at least all of its substated objects.

In the drawings and specification there has been set forth a preferred embodiment of 15 the invention, and although specific terms are employed, these are used in a generic and descriptive sense only and not for purposes of limitation. Changes in the form and the proportion of parts as well as in the substitution of equivalents are contemplated as circumstances may suggest or render expedient without departing from the spirit or scope of the invention as further defined in the following claims.